Iowa Department of Public Health Occupational Health and Safety Surveillance Program (OHSSP) Annual Report July 1, 2010-June 30, 2011

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Occupational Health Indicators/Fundamental Surveillance Program

MAJOR accomplishments and outputs

- Participated in authoring two published MMWR reports: MMWR / April 29, 2011 / Vol. 60 / No. 16: Nonfatal Occupational Injuries and Illnesses Among Older Workers — United States, 2009; and Occupational Highway Transportation Deaths — United States, 2003—2008.
- Partnered with the Iowa Public Health Association and other programs to develop and implement plans for outreach during National Public Health Week (Injury is No Accident theme), which included the use of social media.
- Submitted 2008 lowa Occupational Health Indicators to NIOSH for 19 national indicators.
- Established electronic reporting of five environmental/occupational conditions that must be reported to IDPH. Developed forms and established follow-up guidelines. This is now a pilot project for the electronic lowa Disease Surveillance System.
- OHSSP data was included in 2010 IDPH annual epidemiology report for the first time.
- Held an OHSSP Stakeholders meeting by webinar with presentations by fundamental and expanded programs (i.e., FACE and occupational pesticides poisoning prevention projects).
- Developed and disseminated mandatory reporting information, report forms, case investigation forms, and reference chart for environmental/ occupational reportable conditions, including posting on division web site.
- Updated fact sheets for seven occupational diseases listed in the lowa mandatory reporting regulations.
- Directly contacted more than 60 occupational health clinics, medical laboratories, or employers regarding mandatory disease reporting requirements for lowa, including adult lead tests.
- Coordinated the Health and Safety Tent at the 2010 Farm Progress Show. This national event is held in lowa bi-yearly. Show attendance was approximately 100,000 people over the three-day event.
- Developed press release and fact sheets regarding mold in grain in response to the 2010 floods.

Intermediate IMPACTS

- Gap ID roadway safety response: Identified new partners and key contacts, active participation in the Iowa State Traffic Records Coordinating Committee (STRCC) with data sharing to and from new partners.
- Additional OHSSP data dissemination opportunities pending through the development of the IDPH Data Warehouse and the Iowa Environmental Public Health Tracking projects.
- Stakeholders surveyed for input for IDPH Healthy People 2020.
- Raising awareness and informational referral: Lead in Iowa: Not Just Kids presentation in conjunction with a presenter for Iowa Renovation, Remodeling, and Painting Rule.
- Multiple articles for EpiUpdate: weekly newsletter sent out by listserv to public health and medical providers across Iowa by the IDPH Center for Acute Disease Epidemiology

Potential IMPACTS

- Planning agricultural-related injury surveillance initiative for a pilot project with Iowa's Center for Agricultural Safety and Health (I-CASH) surveillance committee and Iowa AgriSafe Network clinics.
- Participation in a special OSHA meeting in Washington DC, in March 2011 has led to periodic teleconferences with Region 7 (IA, NE, MO, KS) occupational health and safety contacts regarding collaboration with OSHA in Region 7.
- Started a Story Bank file to facilitate developing future articles, press releases, media contacts, etc.
- Developed a template for the Iowa FACE program to use for Iowa FACE ALERTS to disseminate workrelated safety information in a manner other than full FACE investigation reports.
- Conducted discussions with University of Iowa College of Public Health to host a RSS feed for the statebased surveillance clearinghouse; predominately for the IA FACE program and other University of Iowa collaborative materials. Implementation is planned for the next six months.
- Transferred the responsibility of agricultural-related injury data entry from Emergency Medical Services Bureau to the OHSSP in February 2011. Developed new forms. Data analysis scheduled for FY2012.

Pesticide Poisoning Surveillance Program

MAJOR accomplishments and outputs

- Co-author of a MMWR report on acute illness and injury associated with pool disinfectants and other pool chemicals—Six States and the National Electronic Injury Surveillance System, 2002-2008
- Collaborated with Iowa Department of Land Stewardship to share investigation information between organizations.
- Developed and disseminated mandatory reporting information, report forms, case investigation forms, and reference chart for pesticide poisonings, including posting on division web site.
- Hosted display at Health and Safety Tent at 2010 Farm Progress Show. Highlighted pesticide exposures through crop dusting.
- Developed standardized annual report to measure poisoning trends over time.
- Became member of National Environmental Public Health Tracking pesticide initiative workgroup.
- Attended both Winterfest and CSTE conference as a representative of the Iowa Pesticide Poisoning Surveillance program.
- Worked closely with the Iowa Statewide Poison Control Center to receive accurate and timely poisoning reports.
- Investigated multiple cases of crop duster crashes to determine possible public health impact.
- Stakeholders surveyed for input for IDPH Healthy People 2020

Intermediate IMPACTS

- Reports useful in identifying areas of concern for high-risk occupations in the state of lowa.
- Findings from annual report may be used by others to design and implement programming to prevent pesticide poisoning.
- Additional pesticide poisoning data dissemination opportunities pending through the development of the IDPH Data Warehouse and the Iowa Environmental Public Health Tracking projects
- Through increasing the frequency of reporting of pesticide exposures, the Iowa Pesticide program can
 better target interventions to prevent future exposures and the accurate reporting allows for more complete
 follow-up and identification of cases of public health concern.
- Multiple articles for EpiUpdate: weekly newsletter sent out by listserv to public health and medical providers across lowa by the IDPH Center for Acute Disease Epidemiology.

Potential IMPACTS

- State and federal OSHA programs participated in the NIOSH Winterfest meeting in Washington DC. This
 has led to periodic teleconferences with Region 7 (IA, NE, MO, KS) OSHA contacts regarding
 collaboration and capacity building in cases of occupational pesticide poisoning.
- Statewide stakeholder involvement in preventing pesticide poisonings through identifying sources, investigating exposures and developing better handler training programs.
- Increased recognition of the role pesticides play in acute and chronic public health issues.

FACE Program

MAJOR accomplishments and outputs

- Marizen Ramirez, MPH, PhD., is the new Principal Investigator for the FACE Program. Dr. Ramirez will
 provide oversight and guidance for the (UI) FACE Program; review all cases, FACE reports and other
 products; chair the monthly discussion of all investigations; and meet with various external FACE
 constituents.
- Corinne Peek-Asa, MPH, PhD also joined the FACE Program as Co-Principal Investigator. Dr. Peek-Asa
 will assist Dr. Ramirez with the overall guidance and oversight of the program; provide expertise on
 specific cases and reports; and participate in the monthly discussion of all investigations.
- Stephanie Leonard, MS, has been appointed as the new Trauma Investigator. Ms. Leonard is an industrial hygienist who has worked in the area of agricultural health since 1988. In addition, Ms. Leonard has had extensive experience on various workplace safety programs with the Department of Defense and the Agricultural Heath and Safety Pesticide Exposure Study. Concurrently, Ms. Leonard serves as a consultant for Worksafe lowa, a program that provides industrial hygiene and expert witness services to employers and employees of manufacturing, service, utilities and local government and education entities. Iowa FACE cases identified from January 1, 2010 to March 31, 2011 totaled 79 fatalities (74 males and 5 females). Two were under twenty-one years of age (16 youngest) and 28 were sixty years or older (89 oldest). Fifty-eight were white, three were Hispanic, one was black and the race data was unavailable in eleven cases. The most frequent occupation was farming (16 cases) and motor vehicle crash was the most common cause of death (24 cases).
- Four investigative reports have been submitted to NIOSH. The involvement of the State Medical Examiner in the Iowa FACE Program is evident by the fact that during calendar year 2010, the FACE program received ME-1 reports on 70% of the cases and autopsy reports on 59%.

Intermediate IMPACTS

- The epidemiologic skills brought to the FACE Program by Drs. Ramirez and Peek-Asa have led to development of a new comprehensive database which will greatly enhance our ability to analyze the considerable data collected by our active surveillance system. As the conversion from spreadsheets to the database is completed, we anticipate a more robust ability to identify trends, contributing factors, and most importantly identify preventive strategies.
- A unique and particularly notable aspect of the Iowa FACE Program in the past year has been work by Dr. Ryan Sullivan, a UI emergency medicine resident physician who was awarded a Doris Duke Foundation Fellowship to support his research interests. Dr. Sullivan, along with Drs. Ramirez and Peek-Asa has examined the prevalence of positive toxicology testing in fatal occupational injuries occurring in the state of Iowa. They conducted a retrospective study of the FACE reports of workplace related fatalities in Iowa from 2005 to 2009. In Iowa, workplace fatalities require a medical examiner's examination, frequently including toxicology analysis. A total of 429 cases were examined in this period. Of these, 42 cases were excluded due to incomplete or missing records. Of the remaining 387 cases, 77 or 19.9%, were found to have positive toxicology testing. Commonly identified drug classes included Cannabinoids (19 cases), Alcohols (15 cases), Amphetamines (8 cases), among others. Further analysis will include descriptive statistics and models predicting which occupations and industries have the highest prevalence of positively tested drugs involved in traumatic deaths. (Note: Dr. Sullivan has submitted an abstract on this work for consideration at the 2011 NOIRS Symposium.)

Potential IMPACTS

• In the coming year a unique aspect of the Iowa FACE Program will be addition of occupational homicide and suicide investigations. Drs. Ramirez and Peek-Asa have professional interests and experience studying these types of fatal injuries. Dissemination activities will include regular website updates, journal publications, and continued participation in multi-program reports such as those in the MMWR. The toxicology study will continue with further analysis and publications anticipated.